

Understanding Mental Illness



A Guide to Brain Disorders,
Medication, and Therapy

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On the cover: The cover art, created by Luke Trottier, was awarded second place in the LSTA awareness contest.

**IF YOU NEED
IMMEDIATE
HELP
call the 24-
Hour CRISIS
HOTLINE.
See Page 35.**

About Mental Illnesses

“Open Your Mind: Mental Illnesses are Brain Disorders.”

— National Alliance for the Mentally Ill (NAMI)

The National Institute for Mental Health (NIMH) addresses mental illnesses as “as developmental brain disorders with genetic and environmental factors leading to altered circuits and altered behavior. Using new technology, the science of understanding mental illnesses has progressed tremendously in the last few years. Mental illnesses, according to NIMH, range from autism to schizophrenia. Even though the onset of mental illnesses can begin in childhood, it is often not diagnosed until an individual is much older, thus preventing early treatment. Science is looking for ways to diagnose mental health problems early so that interventions can preempt disabilities due to mental illnesses.

The DSM-IV-TR defines mental disorders as “a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom” (p. xxxi).

About this Booklet

Now updated, Understanding Mental Illness has helped countless Missourians understand more about the disorders that affect their families, neighbors or themselves. This booklet and its companion, *The ABCs of Childrens’ Mental Health*, are designed to offer basic information about the most common brain disorders. This book is not intended to give medical or psychiatric advice. We are indebted to readers who have volunteered new information or corrected errors.

***The ABCs of Childrens’ Mental Health* can be found at the Missouri Department of Mental Health website: <http://dmh.mo.gov/docs/mentalillness/abcs.pdf>**

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Introduction

On the following pages you will find a summary of important clinical and social aspects of brain disorders. Much of this information comes from the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders IV-Text Revisions, also called the DSM-IV-TR. This book is used to describe symptoms of brain disorders; professionals use it to make a diagnosis. An understanding of psychiatric diagnoses, and of the medications used in treating brain disorders, will provide the extra knowledge needed to understand mental illnesses.

A Word About Words...

The terms “mental illness,” “mental disorder” and “brain disorder” are used interchangeably in this booklet.

From the Introduction of the DSM-IV (p. xxxxi):

A common misconception is that a classification of mental disorders classifies people, when actually what are being classified are disorders that people have. For this reason, the text of DSM-IV (as did the text of DSM-III-R) avoids the use of such expressions as “a schizophrenic” or “an alcoholic” and instead uses the more accurate, but admittedly more cumbersome, “an individual with Schizophrenia” or “an individual with Alcohol Dependence.”

Another misconception [as the DSM-III-R noted] is that all people described as having the same mental disorder are alike in all important ways. Although all the people described as having the same mental disorder have at least the defining features of the disorder, they may well differ in other important respects that may affect clinical management and outcome.



Frequently Asked Questions

How does the brain work?

Our brain is what makes us human. Its complex set of neurons and chemicals sets us apart from other animals. Our brain controls all of our body's activities, from sleeping, eating, and every day activities to learning functions and memories. Scientists now think the brain even controls how we react to medications. The main working unit in the brain is the neuron. The neuron carries information to and from the brain, much like a wire carries and electric circuit. The neurons trigger the brain's neurotransmitters, the chemical messengers of the brain. These messages then travel to appropriate receptors, which could be another neuron or muscle or gland cells.

The connection between neurons and the receptors are called synapses. Information is processed through synapses. A precise chemical balance and interaction enables synaptic transmission, and is required to make full use of the senses—how the brain perceives what we see, hear, smell, taste and touch. An abnormal change of any kind (brain injury, virus, reaction to drugs, alteration of chromosomes) may cause a person to hallucinate, to have delusions, or to feel suicidal or euphoric. For a comprehensive overview, read Brain Facts. Download this booklet from the Society for Neuroscience Internet website at <http://web.sfn.org>.

How does medication work?

Brain functions are regulated by a complex system of neurochemicals, which influence not only the way we think, but also the way we feel. Psychiatric medications balance the effects of these neurochemicals so that we can feel better and think more clearly. Medication may be necessary to restore health. Note: Patients who begin to feel worse on the prescribed medication should call their healthcare provider, who can prescribe a different medication or adjust the prescribed dosage.

How does psychotherapy work?

Although most of us think of psychotherapy as “talking about our problems,” it really involves learning and establishing new behavioral patterns. The process works something like this:

Not only do nerve synapses (nerve “firing”) require specific chemicals, each synapse creates an electromagnetic “pathway” that can be repeated. Consistent use of that pathway “hardwires” the brain. From birth, our brains master incredible feats, for instance, we must learn to walk and talk until these actions are automatic. So it is with the brain’s “cognitive,” or “thinking” functions. How we think about a situation determines how we will act. For example, recovery depends not only on managing symptoms with medication, but also on adapting responses to specific life situations. Like correcting a softball player’s pitch, therapy makes subtle changes to improve functioning.

Are brain disorders genetic?

Certain traits, such as eye color, are inherited. To that extent, variations in brain structure and chemistry may predispose some people to develop schizophrenia, mood disorders, personality disorders, anxiety or alcoholism. Scientists are gaining more knowledge about the role of genes in mental illness. Research suggests that when and where in the brain a gene “turns on” during development could impact the development of mental illness (NIMH). Though scientists are uncovering the genetic causes to these disorders and others, they also point out that mental illnesses are often the result not only of genetics, but also of environmental and social factors. Posttraumatic Stress Disorder (PTSD) is most often connected to environmental stressors. Environmental stress also plays a role in the development of anxiety and depression. While researchers continue to uncover the secrets of the role genes play in mental illnesses, they also note that genetic abnormalities are merely one factor that may contribute to the onset of mental illness.

Are brain disorders related to gender?

Some researchers suggest that gender differences in mental illness diagnoses are related to stigma associated with certain disorders as well as cultural differences. Research literature on mental disorders suggest that social stresses and the roles women play contribute to more incidence of the diagnoses of depressive disorders among females. Depression in females is attributed to both physiological and social factors that include reproductive hormone influences, as well as poverty and domestic violence. (NIMH)

Current statistics indicate that males are more likely to be diagnosed with autism and ADHD. Females are more likely to develop eating disorders, PTSD and depression.

Do people recover from brain disorders?

To the extent that a person with diabetes will have a normal life, a person with a chronic brain disorder will be able to manage the symptoms of the disorder, and enjoy life.

Recovery rates from anxiety and eating disorders are high. With new medications 80 percent of people who have major depression and 60 percent of people who have schizophrenia, will recover meaningful lives.

How do I get better?

Learn as much as you can about your disorder. Join a support group, such as the National Alliance for the Mentally Ill (NAMI). Exercise your healthcare rights (see page 24). Make life-style changes: exercise, adequate sleep and a nutritious diet essentially improve your quality of life.

Where do I go for help?

Call the Missouri Department of Mental Health at 1-800-364-9687 for assistance, or for more information about brain disorders, substance abuse, intellectual disabilities and developmental disabilities. NAMI of Missouri offers the “Family to Family” Education Course free to family members, as well as “Visions for Tomorrow,” an education course for caregivers of children with brain disorders; call NAMI of Missouri at 573-634-7727 or 1-800-374-2138.

Anxiety Disorders

On-line Resource

National Institute
of Mental Health:
Anxiety Disorders
[www.nimh.nih.gov/
anxiety](http://www.nimh.nih.gov/anxiety)

“Stressed out,” “anxious,” and “out of control” are words commonly used to describe life in today’s fast-paced world. More than 40 million Americans suffer from anxiety disorders. However, not everyone who suffers is treated. Even though anxiety disorders are successfully treatable, only about one-third of the sufferers find relief. “Researchers are learning that anxiety disorders run in families, and that they have a biological basis, much like allergies or diabetes and other disorders. Anxiety disorders may develop from a complex set of risk factors, including genetics, brain chemistry, personality, and life events” (ADAA.org).

Anxiety disorders may be associated with severe, long-term depression, eating disorders, and increased hospitalization and suicide rates. It is now thought that anxiety disorders are linked to genetic, social, and environmental factors. People with anxiety disorders have a high risk of developing alcoholism and other substance dependence disorders. Anxiety disorders are also involved in medical conditions, such as arthritis, asthma, ulcers and increased rates of hypertension.

Anxiety disorders are closely related to neurological disorders such as Tourette’s syndrome, tic disorders and migraines. Outcomes vary for each disorder, but all can be treated, most often with behavioral therapy and medications. Information about the most prevalent anxiety disorders follows, in alphabetical order:

Generalized Anxiety Disorder (GAD)

GAD is described as chronic, exaggerated worry about routine life events and activities. The worry lasts at least six months; a person almost always anticipates the worst, even though there is little reason to expect it. GAD is often accompanied by physical symptoms such as fatigue, trembling, muscle tension, headache, nausea or Temporomandibular Joint Syndrome (TMJ). GAD affects over six million adults. Women are more likely to suffer from GAD than men.

Obsessive-Compulsive Disorder (OCD)

Often beginning in childhood, OCD is characterized by repeated, intrusive and unwanted thoughts that seem impossible to control, linked to ritualized behavior. The essential features are recurrent obsessions or compulsions that are time-consuming (more than one hour per day), or that cause marked distress.

Three per cent of people in the United States have OCD, making it more common than schizophrenia, bipolar disorder or panic disorder. Research suggests a neurochemical basis for OCD, since it responds so well to medication. Recent studies indicate that OCD may be associated with major depressive disorder, other anxiety disorders, eating disorders, bipolar disorders, Tourette’s syndrome or tic disorders. (NIMH)

Obsessive-Compulsive Personality Disorder is a distinct disorder characterized by “a pervasive pattern of preoccupation with orderliness, perfectionism and control.”

OCD Resources

Obsessive Compulsive
Foundation, Inc.
at 617-973-5801
www.ocfoundation.org

St. Louis Behavioral
Medicines Institute
Anxiety Disorders Center
877-245-2688
www.slbmi.com

St. Louis OCD
Support Group
314-291-7556
www.stlocd.org

PTSD Resources

National Center for Post-Traumatic Stress Disorder
www.ptsd.va.gov

Sidran Institute (PTSD education) www.sidran.org

Resources

A Woman's Guide:
Healing from Trauma

"Domestic Violence
101"

Panic Disorder

Panic disorder is characterized by panic attacks or sudden feelings of terror that strike repeatedly and without warning: chest pain, heart palpitations, shortness of breath, dizziness, abdominal discomfort, feelings of unreality, and fear of dying. Panic attacks may be caused by medical conditions, such as hyperthyroidism and cardiac conditions. Substance abuse (intoxication with stimulants such as caffeine, cocaine or amphetamines) or withdrawal from depressants (e.g. alcohol or barbiturates) also may induce panic attacks. One of the most troubling aspects of Panic Disorder is that sufferers may have a continuing fear that they will have a panic attack, thus causing them to avoid situations which are perceived to cause the attacks. This can lead to agoraphobia, a fear of going into places that might cause panic attacks.

About one in three sufferers of Panic Disorder develops agoraphobia. Nearly six million adults suffer from Panic Disorders and women are more likely to suffer from PD than men.

Posttraumatic Stress Disorder (PTSD)

Posttraumatic Stress Disorder is caused by experiencing an extreme traumatic incident such as a mugging or accident; yet PTSD also may occur when a person has been "in association with an interpersonal stressor" over a period of time. (DSM-IV-TR) Those who may develop posttraumatic stress disorder include survivors of accidents, war or natural disasters; or victims of rape, domestic abuse, childhood sexual or physical abuse.

PTSD symptoms include persistent anxiety, rage, excessive aggression, depression, emotional numbing ("blunting" or denial of feelings), risky behavior, hypervigilance, self-mutilation, feeling "out of body," "magical thinking," short or long-term memory loss, panic attacks, flashbacks, sleep disturbances, and eating or elimination disorders. PTSD may co-occur with substance abuse, anxiety disorders, depression or dysthymia. The symptoms of PTSD may be mistaken for other disorders: panic attacks, visual hallucinations (Schizophrenia), compulsive behaviors, regression (Dissociative Identity Disorder), lack of concentration (Attention Deficit Disorder), or "sexualized" or suicidal behaviors (Borderline Personality Disorder).

7.7 million adults have PTSD. Children who experience traumatic events can also suffer from PTSD. It is estimated that one in eight children suffer from PTSD. Untreated childhood PTSD puts children at risk of developing substance abuse problems and poor academic performance.

DSM-IV-TR describes three specifiers to specify onset and duration of symptoms: acute: when the duration of symptoms is less than 3 months; chronic: when the symptoms last 3 months or longer; and with delayed onset: when 6 months have passed between the traumatic event and the onset of the symptoms.

Social Phobia (Social Anxiety Disorder)

People with social phobia have an intense, chronic fear of being watched and judged by others, and of being humiliated by their own actions. They often worry for days or weeks in advance of a dreaded situation. Physical symptoms include blushing, profuse sweating, trembling, nausea, and difficulty talking. The disorder typically begins in childhood or early adolescence. Social phobia occurs in women twice as often as in men, although more men seek help for this disorder. About 15 million American adults have some form of Social Anxiety Disorder. The typical age of onset is 13 years old. 36 percent of people with Social Anxiety Disorder report having symptoms for 10 or more years before seeking help. (AADA)

Mood Disorders

Depressive disorders

Resources

Depression & Bipolar
Support Alliance (DBSA)
1-800-273-TALK
www.DBSAlliance.org

Dr. Ivan Goldberg's
Depression Central
[www.psycom.net/
depression.central.html](http://www.psycom.net/depression.central.html)

See Page 19 for strategies
to help someone who is
depressed.

Mood Disorders are distinguished by disturbances in mood, which affect the physical, mental and social functioning of an individual. (Previously these disorders were classified as either Depression or Manic-Depression.) Depression often manifests when a person is in his or her late 20's, but it can show up at any age. Women are twice as likely to be diagnosed with depression than men.

Trauma, genes, organic imbalances and nutritional deficiencies (e.g. lack of magnesium or vitamin B-12) are known risk factors for depression. Depression is a natural reaction to loss, especially the death of close family members or friends. Depression may also result from exposure to farm pesticides (organophosphates). In other cases, depression may develop without an identifiable source. Environment also plays a role. Childhood sexual abuse, social isolation, or neglect may lead to permanent changes in brain function that increase susceptibility to depression and mood disorders. Mood disorders can be intensified by other illnesses, substance abuse, or reaction to antidepressants. Stress increases the risk of depression and may contribute to recurrent depressive episodes. Substance abuse is linked to mood disorders. NIMH estimates that 30 percent of persons with a diagnosis of depression also have a diagnosis of alcoholism, and 40 percent of alcoholics are diagnosed with depression.

Treatment

There are many medications that offer relief for major depressive symptoms. In most cases, these drugs influence the action of brain neurochemicals such as serotonin, norepinephrine and dopamine. Studies of adults show that psychotherapy is effective when used with antidepressant medication. Cognitive therapy helps the depressed person sort through life's ups and downs, determining which are critical and which are minor. It also helps a person develop positive life goals and tools for obtaining those goals. Results of a NIMH-funded study indicated that interpersonal therapy in combination with an antidepressant medication showed better results than either medication or therapy alone.

Medication can be effective in about 80 percent of identified cases. Medication can make it easier for the patient to discuss his or her feelings and concerns during therapy. Good nutrition, exercise and sleep are essential (but often overlooked) components of mood stability. Medications are not able to cure depression, but help to control symptoms, just like aspirin can reduce fever. Once a person begins taking antidepressant medications improvement of symptoms may not be noticeable for 1-3 weeks.

Electroconvulsive therapy (ECT) is effective—with 80 percent to 90 percent reported improvement. In recent years, the technique of ECT has been much improved. The treatment is given in the hospital under anesthesia so that people receiving ECT do not feel pain. Most patients undergo 6 to 10 treatments. An electrical current is passed through the brain to cause a controlled seizure, which typically lasts for 20 to 90 seconds. The patient is awake in 5 to 10 minutes. The most common side effect is short-term memory loss, which resolves quickly. Another treatment, Recurrent Transcranial Magnetic Stimulation (rTMS or TMS) is a technique in which strong magnets are held on the skull, stimulating electrical brain activity. Recent studies of TMS indicate that TMS improves mood, reduces symptoms of schizophrenia, and relieves anxiety. The most-reported side effect of TMS is a headache.

Major Depressive Disorder

An overwhelming sadness is the essential characteristic of major depression. Hopelessness, helplessness, as well as irritation, anger and rage are symptoms of depression. For diagnosis, five or more of the following criteria are met:

- Have a depressed mood most of the day, nearly every day. (In children or adolescents, it can be an irritable mood) Persistent sad, anxious or “empty” feelings.
- Markedly decreased interest or pleasure in all or almost all activities, most of the day, every day.
- Significant weight loss or gain.
- Insomnia (can’t sleep) or hypersomnia (sleeps too much).
- Sluggish or hyped-up nearly every day.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive, inappropriate guilt.
- Feelings hopelessness and/or pessimism.
- Diminished ability to think or concentrate.
- Recurrent thoughts of death, of suicide, or a suicide attempt.
- Persistent aches or pains, headaches, cramps or digestive problems that do not ease even with treatment.

Dysthymia

This describes a mild depression characterized by irritation, a “lowered expectation of outcomes, and lack of real enjoyment. A person with dysthymia has depression symptoms that last for two years or longer. While dysthymia is not disabling, it does prevent sufferers from feeling well and functioning normally. Children and adolescents with dysthymia often have been depressed so long they cannot recall what not being depressed is like. People think it is part of their personality. Typically they are irritable, hard to please, unhappy with nearly everything and very trying to be around.” (Chandler)

Depression and Co-occurring Conditions

Depression frequently co-occurs with physical illnesses such as heart disease, stroke or cancer, as well as substance abuse. Depression increases the risk for physical illness, disability and premature death. Chronic fatigue syndrome, immune system diseases and sexual dysfunction often accompany depression and anxiety. The symptoms of depression are often overlooked or dismissed by patients and family members because they assume depression is a normal reaction to the physical illnesses. This is a myth. It is important to treat depression simultaneously with other illnesses.

Primary care physicians may fail to identify depression as the cause of physical symptoms; at the same time, psychiatrists may overlook physical causes of depressed moods. In a study of high-rate healthcare users, two-thirds reported a lifetime history of major depression.

Depression and Anxiety Disorders

Often depression coexists with anxiety disorders; depression and each co-occurring illness must be diagnosed and treated. While there is no evidence that one disorder causes the other, nearly one half of patients diagnosed with depression are also diagnosed with an anxiety disorder. Several studies have shown increased suicide attempts by people with co-occurring depression and panic disorder. Rates of depression are especially high in posttraumatic stress disorder (PTSD).

Mood Disorders

Bipolar Disorders

Resources

Child & Adolescent
Bipolar Foundation
(847) 256-8525 www.bpkids.org

Depression and Related
Affective Disorders
Association (DRADA) www.drada.org

Bipolar Disorder (also known as bipolar affective disorder) is characterized by cycling mood changes: severe highs (mania) and lows (depression). Episodes may be primarily manic or depressive, with a level mood between episodes. Mood swings may occur within hours or days (rapid cycling), or may be separated by months to years. “Highs” and “lows” may vary in intensity and severity, and may coexist in “mixed” episodes. Bipolar disorder was once referred to as manic depression.

A manic phase is characterized by being hyperactive, overly talkative (rapid speech), having decreased appetite, sleeping less, being irritated or angry. There may be false or inflated ideas. A person may be very elated, full of grand schemes and risk-taking behaviors. Untreated, mania may progress to psychotic delusions or hallucinations.

In a depressive cycle, the person may have: low mood with difficulty concentrating; lack of energy with slowed thinking and movements; changes in eating and sleeping patterns; feelings of hopelessness, helplessness, sadness, worthlessness or guilt; or thoughts of suicide.

There are varying degrees of bipolar disorder: Bipolar I is characterized by full-blown depressive and manic states, separated by days, weeks or years. “In Bipolar II disorder, depressive episodes alternate with hypomanias (relatively mild, nonpsychotic periods of usually less than 1 week).” (Merck Manual) Milder mood swings may be diagnosed as Cyclothymic Disorder. People with cyclothymia may be misdiagnosed with having depression alone.

While the cause of bipolar disorder is not known, it occurs most often in people who have relatives with the disorder. It affects men and women equally and is often diagnosed between the ages of 15 and 25. Studies show that BP may be triggered by major life changes, antidepressant medications or steroid use, recreational drug use, or periods of sleeplessness. Studies also suggest a link between bipolar disorder and childhood sexual abuse; in this case, therapy must address both the mood disorder and abuse issues.

Seasonal Affective Disorder

Many people are affected by seasonal changes—most often in winter, when a lack of daylight apparently causes depressed mood, overeating (especially craving for carbohydrates) and oversleeping. It is important to note that not everyone who gets the winter “blahs” has SAD. Seasonal Affective Disorder can be treated by sitting under full-spectrum lights for several hours each day, by wearing a light visor, or by using a bedroom light programmed to simulate the early dawn light. Exercise helps alleviate the craving for carbohydrates and improves mood. Symptoms usually begin to build up in late autumn and early winter. SAD can sometimes progress to major depressive disorder.

Bipolar Disorder Medications

The chemical imbalance that causes mood disorders can be adjusted with medication. Lithium and valproic acid (Depakote™) are most often prescribed to maintain level moods. Other medications that might be prescribed are: Carbamazepine and Lamotrigine. Occasionally medication will need to be adjusted. It’s better to make adjustments sooner than later—don’t put off a call to your doctor.

Mood Disorders and Reproductive Hormones

Levels of the reproductive hormones estrogen and progesterone affect women's moods and anxiety levels; these hormones are involved in the following conditions.

Postpartum Depression

Postpartum depression is moderate to severe depression that occurs after a woman has given birth. The causes are often hormonal, but other factors can contribute to PD, such as changes in one's body from pregnancy and delivery, changes in work and social relationships, having less time and freedom, lack of sleep, and worrying about one's ability as a mother. The mother may be excessively sad, cry for no reason, behave erratically, or feel suicidal. She may have nightmares about her baby or have bizarre thoughts. If postpartum depression lasts longer than a week, seek advice from your health care provider. This illness may occur within a week after giving delivery to up to a year later. Most often, it occurs within the first three months after delivery.

Postpartum Obsessive Compulsive Disorder

Researchers cite a history of premenstrual syndrome, marital stress, or a difficult delivery as possible causes of postpartum OCD. Postpartum OCD may also be related to hormones associated with pregnancy and birth. It is estimated that as many as 3-5 percent of new mothers will experience postpartum OCD symptoms of Obsessions, also called intrusive thoughts, which are persistent, repetitive thoughts or mental images related to the baby. These thoughts are very upsetting and not something the woman has ever experienced before. Symptoms for Postpartum OCD include:

- Compulsions, where the mom may do certain things over and over again to reduce her fears and obsessions. This may include things like needing to clean constantly, check things many times, count or reorder things.
- A sense of horror about the obsessions.
- Fear of being left alone with the infant.
- Hypervigilance in protecting the infant.
- Postpartum OCD is temporary and treatable.

Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD)

A NIMH study demonstrated that depressive mood swings and physical symptoms of premenstrual syndrome (PMS) result from an abnormal response to normal hormone changes during the menstrual cycle. Premenstrual Dysphoric Disorder (PMDD) is a more severe form of PMS and is also related to the complex interrelationships of menstrual hormones to neurochemicals that influence thoughts and moods. Premenstrual dysphoric disorder is diagnosed "only when mood symptoms seriously impact relationships and impair functioning at work or school." The National Institute of Mental Health estimates that between 20 and 50 percent of women have PMS, but only 3 to 8 percent of women have PMDD.

Borderline Personality Disorder and Estrogen

A University of Missouri study (2002) as well as other studies since then suggest that fluctuations in estrogen levels during the menstrual cycle may significantly worsen BPD symptoms. Researchers found that, when estrogen levels are rising, women are more prone to BPD symptoms such as rapid changes in self-evaluation and relationships.

Schizophrenia

Resources

www.nimh.nih.gov

A Beautiful Mind: A
Biography of John Nash
Forbes, Jr. Sylvia Nasar,
New York: Touchstone
1998.

One in one-hundred people will develop schizophrenia, a severe and disabling brain disease that affects a person's thoughts and behavior. Untreated, schizophrenia causes distortions of reality; a person may have auditory or visual hallucinations, be fearful and withdrawn, or behave inappropriately for the circumstances.

Although it's unclear whether schizophrenia has a single or multiple underlying causes, evidence suggests that it is a neurodevelopmental disease likely involving a genetic predisposition, a prenatal insult to the developing brain and stressful life events. The role of genetics has long been established; the risk of schizophrenia rises from 1 percent with no family history of the illness, to 10 percent if a first degree relative has it, to 50 percent if an identical twin has it. Prenatal insults may include viral infections, such as maternal influenza in the second trimester, starvation, lack of oxygen at birth, and untreated blood type incompatibility. [NIMH]

The essential features of schizophrenia are:

- The presence of certain psychotic features during the active phase of the illness, such as delusions or hallucinations.
- Deterioration from a previous level of functioning in such areas as work, social relations and self-care.
- Onset before age 45 (usually in adolescence or early adulthood, although it can occur in childhood).
- A duration of at least six months.

Schizophrenia is most often diagnosed following an acute psychotic episode. According to the NIMH there are several types of schizophrenia and symptoms can be different depending on which type a person has:

- Paranoid types often feel anxious, are more often angry or argumentative, and falsely believe that others are trying to harm them or their loved ones.
- Disorganized types have problems thinking and expressing their ideas clearly, often exhibit childlike behavior, and frequently show little emotion.
- Catatonic types may be in a constant state of unrest, or they may not move or be underactive. Their muscles and posture may be rigid. They may grimace or have other odd facial expressions, and they may be less responsive to others.
- Undifferentiated types may have symptoms of more than one other type of schizophrenia.
- Residual types experience some symptoms, but not as many as those who are in a full-blown episode of schizophrenia.

The characteristic symptoms always include disturbances in several of the following areas:

Content and form of thought

The primary disturbance involves delusions that are often multiple, fragmented, or bizarre. Examples include paranoid and persecutory delusions or beliefs about others (e.g., "The CIA is after me"); delusions of reference in which events, objects, or other people are given particular and unusual significance; the belief that one's thoughts and feelings are not one's own, or are imposed by some external force. Ideas shift from one subject to a completely unrelated topic, without the speaker showing any awareness that the topics are unconnected.

Relationship to the external world

Frequently, people who have schizophrenia will be emotionally withdrawn, may become preoccupied with egocentric and illogical ideas and fantasies, or may be paranoid. They may be physically withdrawn (become catatonic).

Perception

The most common deficits of perception are auditory hallucinations, frequently involving voices perceived as coming from outside the head. The voices may be familiar, and often may make insulting statements. Tactile hallucinations may be present; these typically involve electrical, tingling, or burning sensations. Hallucinations of sight, smell or taste occur with less frequency, and their presence may raise the possibility of a disorder associated with a medical condition (such as a brain tumor).

Affect

“Affect” means how a person appears to others. With schizophrenia, the “sense of self,” which normally gives a person the feeling of individuality, uniqueness, and self-direction, is frequently disturbed. Thus, a person with schizophrenia will display inappropriate expressions of emotion, such as laughing at a tragic story. On the other hand, a person with schizophrenia may display no recognition of the world around him. Note that a few antipsychotic drugs have side effects that may appear similar to the “flat” or blunted affect seen in people who have schizophrenia.

Psychotic Episodes

During a psychotic episode, a person is out of control. Psychotic episodes may occur in schizophrenia, as well as in the manic phase of bipolar disorder. Use of amphetamines, cocaine or hallucinogens also may cause psychotic behavior.

Psychotic episodes may present a danger to self or to others. See page 20, “Decompensation,” for details.

Treatment

Medications to manage the symptoms of schizophrenia have improved significantly. Antipsychotic medications are especially helpful in reducing hallucinations and delusions. The newer generation “atypical” (or “Second Generation”) antipsychotics, such as olanzapine and clozapine, appear to improve motivation and emotional expressiveness in some individuals. Also, new medications are less likely to produce movement disorders such as extrapyramidal symptoms or tardive dyskinesia. During an episode of schizophrenia, a person may need to stay in a hospital for safety reasons and to receive basic needs such as food, rest, and hygiene.

People with schizophrenia, as well as their families, also can benefit from supportive counseling, psychotherapy and social skills training.

Borderline Personality Disorder

RESOURCE

Stop Walking on Eggshells:
Taking Back Your Life When
Someone You Care About
Has BPD, Randi Kreiger
and Paul Mason, New
Harbinger Publications.
1998

Borderline Personality Disorder (BPD) is characterized by a “pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts.” A person with BPD makes “frantic efforts to avoid real or imagined abandonment.” Borderline Personality Disorder (BPD) is prevalent in 2 percent of the general population and 10 percent of all mental health outpatients. Of these, 75 percent are women, and 75 percent of women diagnosed were physically or sexually abused. (Dr. Ivan Goldberg)

Recent research suggests a limbic system dysfunction causes this syndrome. The limbic system is thought to be the “emotion center” of the brain, thus some people advocate that “Emotional Regulation Disorder” is a more accurate term. Another biological cause for BPD could be low level brain activity in the pre-frontal cortex of the brain. These biological explanations have led researchers to believe that BPD is not merely a personality flaw.

The person has a pattern of “unstable and intense interpersonal relationships.” To this person, life is black or white; people are good or evil. People are idealized—then out of the blue, the rules change. BPD is characterized by potentially self-damaging risk-taking (e.g., overspending, promiscuous sex, substance abuse, reckless driving or binge eating); recurrent suicidal behavior, gestures or threats; self-mutilating behavior; a chronic feeling of emptiness; inappropriate, intense anger; and/or stress-related paranoid ideations or severe symptoms of dissociation.

BPD does not occur in a vacuum. It commonly coexists with one or more disorders: PTSD; mood disorders; panic or anxiety disorders; ADHD; eating disorders; OCD; dissociative or gender identity disorders. Treatment for BPD includes both counseling and medication.

NOTE: A diagnosis of Borderline Personality Disorder cannot be made over the phone, on the internet, or by reading this book.

Self-Injury

Typically, self-injury begins in adolescence. This is a behavior to injure oneself by cutting, burning, bruising or by other methods. It does not include tattoos or piercing body parts.

Self-injury is often linked to BPD, bipolar disorder, PTSD and dissociative identity disorder. It is often associated with childhood abuse or parental substance abuse. Self-injury may be triggered by severe emotional pain, or by feelings of shame. Both genders may practice self-injury. Teenagers may experiment with self-injury as well.

Cutting and self-harm are often ways to express deep distress and cope with painful memories. Understanding why one self-harms is important to recovery. Learning the source of negative emotions and how to address those sources can reduce the desire for self-harm.

Online Resources:

BPDcentral@aol.com; HelpGuide.org - http://www.helpguide.org/mental/self_injury.htm;
<http://www.borderlinepersonalitydisorder.com>; http://www.sisupport.org/coping_skills.htm

Addictive Disorders

Drug Facts

DMH-ADA www.dmh.mo.gov/ada

National
Clearinghouse for
Alcohol and Drug
Information
800-729-6686 TDD
800-487-4889 linea
gratis en español
877-767-8432
www.ncadi.samhsa.gov

Problem Gambling

National Council on
Problem Gambling
Hotline 1-800-522-4700
www.ncpgambling.org

Gambling
Hotline:
1-888-238-
7633

As a result of scientific research, we know that addiction is a disease that affects both brain and behavior. We have identified many of the biological and environmental factors and are beginning to search for the genetic variations that contribute to the development and progression of the disease. Scientists use this knowledge to develop effective prevention and treatment approaches that reduce the toll drug abuse takes on individuals, families, and communities. (National Institute of Drug Addiction, 2010)

Substance Dependence and Substance Abuse

Substance dependence is a disorder featured by a “cluster of cognitive, behavioral and physiological symptoms” associated with use of drugs (such as alcohol, sedatives, cold medications, opiates, cannabis, amphetamines) or toxins (such as inhalants). A person with this disorder will continue the substance use despite harmful effects to health, lifestyle or associates.

Substance abuse is distinguished by “the harmful consequences of repeated use” (DSM-IV-TR): neglect of family and work responsibilities; use in physically hazardous situations; incurring legal problems; and recurrent social problems. Substance abuse is considered a disease because drugs change the structure of the brain and how it works.

Substance Related Disorders

Substance-related disorders may be defined as abuse of substances, such as alcohol or drugs; side effects of medications; or exposure to toxins such as lead, antifreeze, carbon monoxide and inhalants. In the elderly population, what may appear to be dementia could be a disorder caused by adverse side effects of prescription drugs. Always tell a physician exactly what drugs the elder is using; if a person is suddenly and unusually disoriented, get help immediately.

Co-occurring Disorders

People who have mental illnesses also may abuse alcohol or drugs; they may be “self-medicating” to find relief from the symptoms of a brain disorder. Both conditions must be treated.

- 37 percent of alcohol abusers and 53 percent of drug abusers also have at least one serious mental illness.
- Of all people diagnosed with mental illness, 29 percent currently abuse either alcohol or drugs and 60 percent will abuse either alcohol or other drugs some time during their lifetime.

Pathological Gambling

Pathological gambling is defined as being unable to resist the impulses to gamble, which can lead to severe social and personal consequences. It usually begins in early adolescence in men, and between ages 20 and 40 in women.

People with this problem often exhibit repetitive behaviors as do those with OCD, but pathological gambling is considered a different condition. In people who develop pathological gambling, occasional gambling leads to a gambling habit. Stressful situations can worsen gambling problems.

Brain Disorders diagnosed in Childhood

For a more information about brain disorders in childhood see the following NAMI website: http://www.nami.org/Content/ContentGroups/Policy/WhereWeStand/Issues_Specific_to_Children_with_Brain_Disorders_-_WHERE_WE_STAND.htm

Autism Resources

University of Missouri
Autism Assessment
Clinic 573-884-2131

NARHA (North
American Riding for the
Handicapped Assn.)
1-800-369-7433 www.narha.org

Attention Deficit/Hyperactivity Disorder

A growing number of children, especially boys, are being diagnosed with attention deficit / hyperactivity disorder (ADHD). There are three subtypes of ADHD: predominantly inattentive, predominantly hyperactive-impulsive, and combined hyperactive-impulsive and inattentive. Typically, a person diagnosed with ADHD, predominantly inattentive sub-type, will fail to pay attention to details; has difficulty sustaining interest in tasks or play; does not listen when spoken to directly; does not follow through on instructions; is easily distracted; and is forgetful. This person may not act out, but when he or she is sitting quietly, the person may not be paying attention. In children, this problem is often unnoticed. A person with hyperactive-impulsive type typically: fidgets or squirms; cannot remain seated; has difficulty playing quietly; often talks excessively; often interrupts or intrudes on others.

Those with the combined subtype of ADHD exhibit six or more symptoms of either inattentive or hyperactive-impulsive types. Most children suffer from the combined type. However, not all children—or adults—will exhibit both disorders, although a significant number do. A person must exhibit characteristics of ADHD in more than one setting, for instance in school and home; or home and day care. It is important to get psychiatric evaluation to determine if ADHD, rather than another psychological disorder, is present. Amphetamines, which improve focus and concentration, are most often prescribed for people diagnosed with ADHD.

Autism Spectrum Disorders

A recent study estimated that 3.4 of every 1,000 children ages 3-10 are affected by autism spectrum disorders (Yeargin-Allsopp M, Rice C, Karapurkar T, Doernberg N, Boyle C, Murphy C., 2003). Persons with autism, a developmental disability, generally “have restricted, repetitive, and stereotyped patterns of behavior, interests, and activities.” Prior to the age of three, they will have “delays or abnormal functioning” in social interaction, language or creative play. Generally, parents first notice that their infants: do not respond normally to the parent; will not give social smiles; or have movements such as rocking, swaying, clapping or exaggerated tiptoeing. Children with autism often exhibit intellectual disabilities. Autism includes Asperger’s syndrome (males) and Rhett’s disorder (females).

While the cause of autism is debated, the outcome is influenced by early intervention, consistent routine and special therapy.

Eating Disorder: Anorexia Nervosa

With this eating disorder, a person “refuses to maintain minimal body weight [for age and height], is intensely afraid of gaining weight,” and has “significant” misperceptions of body image. While the average age of onset is 17, it has been noted in persons (90 percent are females) as young as 13. Anorexia is potentially fatal, and may be associated with anxiety and/or depression. Therapy may include behavior modification, group therapy, and/or antidepressant medication.

Resources

Oppositional Defiant Disorder: Help for the Angry, Troubled Child, John F. Taylor and Jamie Miller, Prima Communications, 2001.

Winning Cooperation from Your Child: A Comprehensive Method to Stop Defiant and Aggressive Behavior in Children, Kenneth Wenning, Jason Aronson Publishers, 1996.

“A Place for Us” www.conductdisorders.com

Child & Adolescent Bipolar Foundation at www.bpkids.org

The Bipolar Child, The Definitive and Reassuring Guide to Childhood's Most Misunderstood Disorder, Demetri F., MD and Janice Papoulas, Broadway Books, 1997. www.bipolarchild.com

Eating Disorder: Bulimia Nervosa

This disorder is characterized by binge eating and subsequent purging. For diagnosis, it must occur, on the average at least twice a week for three months. Unrealistic feelings about body shape and weight are common. Therapy may include antidepressant medication and/or cognitive behavioral therapy.

Oppositional Defiant Disorder

Essentially, in this disorder there is a “recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persists for at least six months,” characterized by losing temper, arguing, defiance, annoying others, blaming others, being angry, resentful, spiteful or vindictive.

These behaviors usually appear (in both males and females) before eight years of age, and no later than early adolescence. This appears to be more common in families in which at least one parent has a mood or substance abuse disorder.

Conduct Disorder

Similar to oppositional defiant disorder, the “essential feature of Conduct Disorder is a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated...” [DSM-IV]

This behavior is diagnosed when seen in a variety of settings. Typically, a person with this disorder is aggressive, deceitful, and lacks empathy for the feelings of others. Often adolescents with Conduct Disorder will have frequent accidents, run away from home, play hooky from school, and shoplift.

Mood Disorders — Bipolar Disorder

Can a child become seriously depressed? Certainly. The signs of depression or mania are similar for children and adults: a child or adolescent has recurring depression, with or without manic episodes, and has not been without symptoms for more than two months at a time, over the period of a year. If a child talks about wanting to commit suicide, BELIEVE IT. Get medical assistance immediately. WARNING!! The FDA has advised that, due to related risk of suicide, SSRI medication should not be prescribed for children or youth. [For more information, see the section on Mood Disorders beginning on page 10.]

Schizophrenia

The symptoms of schizophrenia usually appear in adolescence to early adulthood; these symptoms also can appear in childhood. Therapy is similar for that of adults. [See page 12.]

Dementia, Alzheimer's Disease and Related Disorders

Resources

Call the National Alzheimer's Association Support Line at 800-272-3900 for information or to locate a your chapter.

Or visit the web site at www.alz.org.

National Center for Elder Abuse <http://www.ncea.aoa.gov>

For more information on aging visit: <http://www.missouriseniorreport.org/>

Call the Elderly Abuse and Neglect Hotline at 1-800-392-0210 to report elder abuse

Mental disorders grouped under the term dementia include one common factor: deterioration in cognitive functioning. According to the DSM-IV-TR, this deterioration is observed in a pattern of cognitive, or thinking, deficits. Typically, memory, motor skills and orientation (sense of place) are impaired or disturbed.

Symptoms of dementia include: loss of memory, impaired judgment, inability to concentrate; loss of speech, impaired word recognition, loss of mathematical ability, and inability to learn; as well as confusion and change in personality.

Proper care of people with dementia includes timely medical treatment, structured environment, and—most of all—support.

Alzheimer's disease is one type of dementia. (Note: Dementia and Alzheimer's disease are not the same and should not be used interchangeably.) Although the cause has not been determined, many scientists believe that Alzheimer's disease results from an increase in the production of accumulation of a specific protein (beta-amyloid protein) in the brain that leads to nerve cell death. The FDA has approved two classes of drugs to treat cognitive symptoms of Alzheimer's disease. Cholinesterase inhibitors commonly prescribed are donepezil (Aricept); rivastigmine (Exelon); and galantamine (Reminyl). The second class includes Memantine. Tacrine (Cognex) is rarely prescribed today because of associated side effects, including possible liver damage.

The prevalence of dementia increases with age, although some medical conditions cause dementia at a much earlier age (such as brain injury, early-onset Alzheimer's, brain tumors, strokes, substance abuse and HIV infections). Many people with Alzheimer's disease may go undiagnosed for several years. People may remark that the person in question is "getting senile."

As the disease progresses, personality changes and impaired judgment are noticed. The person is extremely disoriented. At this stage, both the person with Alzheimer's and their family can need assistance. They can benefit from the supportive environment of adult day care, home health care or a nursing home. Research has shown that a homelike environment promotes mental health.

Web site resources include:

- The Eden Alternative at www.edenalt.com
- The Pioneer Network at www.pioneernetwork.net

Call 1-800-MEDICARE to request the Guide to Choosing a Nursing Home, which covers decisions about finances, a "Nursing Home Checklist," and other important considerations. In Missouri, check on recent state inspections of all long-term care facilities. Access the web site from: www.dhss.state.mo.us/Senior_Services/.

When A Person is Depressed or Withdrawn

Resources

The Power of Procovery in Healing Mental Illness: Just Start Anywhere.
Kathleen Crowley. San Francisco: Kennedy Carlisle Publishing Co. (2000). For information, see www.procovery.com.

American Foundation for Suicide Prevention: <http://www.afsp.org>

SUICIDE

Signs of suicide include:

- talking about it
- withdrawing from friends and family
- suddenly making a will
- giving away personal possessions
- increasing use of drugs or alcohol

According to the American Foundation for Suicide Prevention, at least 90 percent of people who commit suicide have diagnosable and treatable psychiatric illnesses. Between 20 and 50 percent of people who kill themselves had a history of suicide attempts. “Those who have made serious suicide attempts are at a much higher risk for actually taking their lives.” There is a clear relationship between low levels of serotonin and incidents of attempted and completed suicide in psychiatric patients.

Other risk factors include a family history of suicide or suicide attempts, depression or other psychiatric illness, and impulsivity.

Males are three to five times more likely to die by suicide than females. Elderly Caucasian males have the highest suicide rates.

Strategies to help a person who is depressed

1. Focus on the positive. Affirm the person’s value. Small steps are important; celebrate “ordinary” accomplishments.
2. Have hope. Emphasize what the person enjoys and can realistically look forward to in the future. Crowley reminds us to focus on reasons for living, not reasons for dying.
3. Encourage a realistic activity level. It is important to take care of physical needs, get rest and exercise. Encourage the person to do what they can do.
4. Remember, relapse is part of recovery.
5. Don’t tell people to “cheer up,” “pull yourself together,” or to “snap out of it.” Sadness and regret are part of the healing process. It’s necessary to have these feelings. Never suggest that depression is a sign of weakness.
6. Do not blame people for their symptoms or become impatient with them for not doing more. People who are depressed already feel self-critical and inadequate; they don’t need more of that from someone else. As Crowley says, “Support, don’t enforce.”
7. You are not responsible for the individual’s health and happiness. It won’t be your “fault” if something doesn’t work out the way you think it should.

IN CRISIS: Don’t argue about suicide. Let the person talk. Be there with them; do not leave them. Call 1-800-SUICIDE, a national suicide hotline, or a local Crisis Hotline (page 35), where you can get professional assistance. WHEN IN DOUBT, CALL 911.

Decompensation

When a person with a serious, chronic mental disorder begins to have an increase in symptoms, it is termed decompensation. Inform a healthcare provider immediately. Often an adjustment in medication will alleviate the problem. To help someone who is decompensating, use the following techniques:

1. Be observant and proactive. Ask what the person is thinking or feeling when they begin acting differently, especially if physical symptoms or side effects are noticed.
2. In early stages, as changes are observed, notify medical staff so medications can be evaluated.
3. Attempt to involve this person in group and individual activities. Try to avoid isolation and withdrawal, which contribute to decompensation.
4. Give reality feedback. In a gentle and accepting manner, be honest with people in saying that their delusions do not appear to match up with what is actually happening. This can be done without actually disagreeing with them. Rather than saying that the experience doesn't exist, validate it by saying, "That must be very distracting (or confusing, frightening, etc.)." It's okay to say that you perceive something differently and that you would like to understand more about their perceptions.
5. Help people to concentrate and to keep on track by asking questions which will return them to the point of the conversation. Help them refocus if they are confused while doing a task.
6. Be open. Give individuals the opportunity to talk about how confusing and frightening the experience may be.
7. Continue to be consistent, but firm, in letting individuals know what the ground rules are, and what is expected. They may be confused, or may be hallucinating, or distorting things which they have known to be real or true in the past.

Should A Person Become Violent

1. Call 9-1-1 or have someone else call.
2. Direct others to leave the area slowly and quietly. (Be sure that other people are out of potential danger.)
3. Do not invade the person's physical space. Allow the person to remain in his or her present position.
4. Identify the anxiety prompting the angry behavior. Do this by LISTENING. Don't assume that you know their motives. If possible, ask questions. Encourage talking rather than acting out.
5. Provide alternatives that will allow them to save face and regain self-esteem.

Glossary

AFFECT. A pattern of observable behaviors that is the the content of speech or ideation. “labile”—Abnormal variability in affect with repeated, rapid, and abrupt shifts in affective expression. “restricted” or “constricted”—Mild reduction in the range and intensity of emotional expression.

AGITATION. (psychomotor agitation). Excessive motor activity associated with a feeling of inner tension. The activity is usually nonproductive and repetitious (pacing, fidgeting, wringing hands).

AKATHISIA. Internal restlessness, sometimes caused by neuroleptic medication. Described as a painful inability to be inside one’s skin. Symptoms include fidgety movements; rocking from foot to foot; pacing; inability to sit or stand still for at least several minutes.

ANXIOLYTIC. Reduces tension and irritability, relieves anxiety.

APHASIA. An impairment in the understanding or transmission of ideas by language in any of its forms (reading, writing, speaking) due to injury or disorders of brain centers involved in language.

ATAXIA. Partial or complete loss of voluntary muscular movement.

CATATONIC BEHAVIOR. Marked motor abnormalities including immobility, certain types of excessive motor activity (apparently purposeless agitation not influenced by external stimuli), extreme negativism (apparent resistance to instructions or attempts to be moved) or mutism, posturing or stereotyped movements.

DEFENSE MECHANISM. Automatic psychological process that protects the individual against anxiety. Defense mechanisms may include projection, spitting, and acting out.

DELUSION. A false conviction based on incorrect beliefs about external reality that is firmly sustained, despite evidence to the contrary.

DISORIENTATION. Confusion about the time of day, date, or season (time), where one is (place), or who one is (person).

DISSOCIATION. A disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment, e.g., “out of body” feelings, “running on automatic pilot.”

DYSTONIAS. Involuntary contraction of muscle groups.

EXTRAPYRAMIDAL SYMPTOMS (EPS). Drooling, tremors, akathisia, shuffling gait, tardive dyskinesia.

Glossary

GRANDIOSITY. An inflated appraisal of one's worth, power, knowledge, importance, or identity.

HALLUCINATION. A sensory perception that has the compelling sense of reality of a true perception, but that occurs without external stimulation. Hallucinations are distinguished from illusions, in which an actual external stimulus is misperceived or misinterpreted.

HYPNOTIC. Sedative drug. Reduces excitability and induces sleep.

ILLUSION. A misperception or misinterpretation of a real external stimulus, e.g., hearing the rustling of leaves as the sound of voices.

MOOD. A pervasive and sustained emotion that colors perception of the world. Common examples of mood include depression, elation, anger or anxiety. In contrast to affect, which refers to more fluctuating changes in emotional "weather," mood refers to a more pervasive and sustained emotional "climate."

PANIC ATTACKS. Periods of sudden onset of intense apprehension, fearfulness or terror, often associated with feelings of impending doom. During these attacks, symptoms include shortness of breath or smothering sensations; palpitations, pounding heart, or accelerated heart rate; chest pain; and fear of going crazy or losing control.

PARANOID IDEATION. Having an idea (of less than delusional proportions) involving suspiciousness or the belief that one is being harassed, persecuted, or unfairly treated.

PARKINSON SYMPTOMS (Parkinsonism). Rigidity; frozen or stooped posture; shuffling gait; slow, monotonous speech; fixed stare or facial expression. Hand tremors.

PERSONALITY. Enduring patterns of perceiving, relating to, and thinking about the environment and oneself. When personality traits are inflexible and maladaptive, and cause either significant functional impairment or subjective distress, it is called a Personality Disorder.

PHOBIA. A persistent, irrational fear of a specific object, activity or situation, that results in an overwhelming desire to avoid it.

PHOTOSENSITIVITY. Sensitivity to sunlight.

POSTURAL HYPOTENSION. Dizziness when going from horizontal to vertical position.

PRODROME. An early or premonitory sign or symptom of a disorder.

Glossary

PSYCHOTIC. Delusions or prominent hallucinations, with the hallucinations occurring in the absence of insight into their pathological nature.

RESIDUAL PHASE. The phase of an illness that occurs after remission of the florid symptoms or the full syndrome.

STEREOTYPED MOVEMENTS. Repetitive, seemingly driven, and non-functional motor movements (e.g., hand shaking or waving, body rocking, head banging, mouthing of objects, self-biting).

STRESSOR. Any life event that may be associated with the onset, occurrence, or exacerbation of a mental disorder.

SYNDROME. A grouping of symptoms, based on their frequent co-occurrence, that may suggest a common underlying disease or disorder.

TARDIVE DYSKINESIA. Medication side effects which may include uncontrolled movements of face, mouth, tongue, or jaw, and involuntary movements of extremities. Incidence of Tardive Dyskinesia was reduced to 0.05 percent of patients who took the following vitamins on a daily basis: Vit C 3 gr., Vit B3 3 gr, Vit B6 600 IU, and Vit E 600 IU. Other sources suggest taking at least 400 IU Vit E to control new onset Tardive Dyskinesia.

TIC. An involuntary, sudden, rapid, recurrent, nonrhythmic, stereotyped motor movement or vocalization.

Your Healthcare Rights

Your health care provider should:

- listen carefully to everything you say and answer your questions.
- be hopeful and encouraging.
- suggest treatment based on what you want and need.
- teach you how to help yourself.
- know about or be willing to try alternative or new ways to help you feel better.
- be willing, at your request, to talk with other health care professionals, your family members or friends about your healthcare.

**David R. Hawkins, in
“The prevention of
Tardive Dyskinesia
with high dosage
vitamins: A
study of 58,000
patients,” Journal
of Orthomolecular
Medicine. 1(1), 1986.**

You have the right to:

- a second opinion.
- be treated with dignity, compassion and respect at all times.
- know the side effects of recommended medications and treatments.
- refuse medications and treatments that are unacceptable to you.
- decide for yourself which treatments are acceptable to you and which are not.
- change health care providers (depending on the options available from your insurance).
- have the person or people of your choice accompany you when you are seeing your doctor or other health care provider.

(from Recovering Your Mental Health, U.S. Dept. of Health & Human Services)

For more information on mental health care rights and services visit:
<http://dmh.mo.gov/mentalillness/helpinfo/consumerlinks.htm>

Commonly Prescribed Psychiatric Medications

On the following pages, you'll find information about psychiatric medications commonly used to treat mental illnesses. New psychiatric drugs are constantly being tested and approved for use in the United States. This list is by no means the most current, nor is it comprehensive. For the latest information on medications as well as side effects, refer to the Physician's Desk Reference or www.pdrhealth.com.

Medication Side Effects

See pages 30-31 for common side effects.

Selected Psychiatric Drug Classes

Amphetamine (for ADHD) Central nervous system stimulant. Brain functions are enhanced, especially ability to concentrate.

Benzodiazepine Sedative-hypnotic agents commonly used for a variety of situations that include seizure control, anxiety, alcohol withdrawal, insomnia, control of drug-associated agitation; as muscle relaxants, and as preanesthetic agents. Use of benzodiazepines may cause dependence. Withdrawal should be monitored by a physician.

Cholinesterase inhibitor Designed to enhance memory and other cognitive functions; dementia therapy.

First Generation (antipsychotic) Reduces psychiatric disorders without causing addiction or euphoria. Side effects may include extrapyramidal symptoms, tardive dyskinesia, Parkinsonism.

Monoamine Oxidase Inhibitor (MAOI) Antidepressant See MAOI Diet, page 32.

Second Generation Antipsychotics other than First Generations.

Selective Norepinephrine Reuptake Inhibitor, SNRI (antidepressant)

Selective Serotonin Reuptake Inhibitor, SSRI (antidepressant) WARNING: FDA recommends caution for use in children.

Tricyclic (antidepressants) enhance the concentrations of the neurochemicals norepinephrine and serotonin.

List of Commonly Prescribed Psychiatric Medications

Brand Name (generic name)	class	usage
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Abilify (aripiprazole)	<i>second generation</i> antipsychotic	
Adapin, Sinequan (doxepin)	<i>tricyclic</i> antidepressant	
Anafranil (clomipramine)	<i>tricyclic</i> antidepressant – antiobsessional	
Antabuse (disulfiram)	alcohol abuse	
Artane (trihexyphenidyl)	extrapyramidal symptoms	
Asendin (amoxapine)	<i>tricyclic</i> antidepressant	
Atarax, Vistaril (hydroxyzine hydrochloride)	tranquilizer	
Ativan (lorazepam)	<i>benzodiazepine</i> anxiolytic, sedative	
Aventyl (nortriptyline)	<i>tricyclic</i> antidepressant	
Azene (chlorazepate)	<i>benzodiazepine</i> anxiolytic	
Benadryl (diphenhydramine)	antihistamine	
Buspar (buspirone)	[azaspirodecanediones] anxiolytic	
Carbolith, Cibalith-S, Duralith (see lithium)	bipolar disorder	
Celexa (citalopram hydrobromide)	<i>SSRI</i> antidepressant	
Centrax (prazepam)	<i>benzodiazepine</i> anxiolytic	
chlordiazepoxide (see Libritabs, Librium)		
chlorazepate (see Azene)		
chlorpromazine (see Largactil, Thorazine)		
citalopram hydrobromide (see Celexa)		
clomipramine (see Anafranil)		
clonazepam (see Klonopin, Rivotril)		
clozapine (see Clozaril)		
clorazepate (see Azene)		
Clozaril (clozapine)	<i>dibenzodiazepine</i> derivative <i>Second Generation</i> antipsychotic	
Cogentin (benztropine)	treatment of extrapyramidal reactions (except tardive dyskinesia)	
Cognex (tacrine hydrochloride)	<i>cholinesterase inhibitor</i> Alzheimer's disease. (Note: Cognex is "rarely prescribed today because of associated side effects, including possible liver damage." Alzheimer's Assn. "Facts" 12/2003)	
Cylert (pemoline)	<i>stimulant</i> ADHD. Not recommended for children under the age of 6.	
Dalmane (flurazepam)	<i>benzodiazepine</i> derivative hypnotic, for insomnia.	
Depakene (valproate, valproic acid)	anticonvulsant, for symptoms of bipolar disorder.	
Depakote (divalproex)	anticonvulsant, for symptoms of bipolar disorder	
desipramine (see Norpramin, Pertofrane)	<i>tricyclic</i> antidepressant	
Desyrel (trazodone)	sedative, antidepressant	
Dexedrine (dextroamphetamine)	treatment of narcolepsy, ADHD, epilepsy and parkinsonism	
dextroamphetamine (see Dexedrine)	<i>amphetamine</i>	
Dilantin (phenytoin sodium)	anticonvulsant	
Duralith (lithium)	bipolar disorder	
Effexor (venlafaxine)	<i>phenethylamine bicyclic derivative</i> SNRI antidepressant	
Elavil, Endep (amitriptyline)	<i>tricyclic</i> antidepressant	
Equanil (meprobamate)	tranquilizer, muscle relaxer, anxiolytic	
Epival (divalproex)	anticonvulsant, for maintenance of bipolar disorder	
Eskalith (lithium)	for maintenance of bipolar disorder	

ethosuximide (see Zarontin)

Etrafon (perphenazine) *First Generation* anxiolytic, antipsychotic

fluoxetine (see Prozac)

fluphenazine (See Modecate, Permitil, Prolixin)

flurazepam (see Dalmane)

fluvoxamine (see Luvox)

Geodon (ziprasidone) *second generation* antipsychotic for the treatment of schizophrenia

halazepam (see Paxipam)

Halcion (triazolam) *benzodiazepine* depressant, treatment of insomnia or sleep disturbances

Haldol (haloperidol) *tricyclic* antipsychotic for schizophrenia or bipolar disorder mania haloperidol (see Haldol)

imipramine (see Janamine)

Imovane (zopiclone) [Hypnotic related to benzodiazepines] short-term management of insomnia

Inderal (propranolol). *Beta-Adrenergic Receptor Blocking Agent* (“Beta Blocker”) for migraine headache

Isoptin, Calan (verapamil) *calcium ion influx inhibitor* treatment of mild to moderate hypertension

Janimine (imipramine) *tricyclic* antidepressant

Klonopin, Rivotril (clonazepam) *benzodiazepine* anxiolytic

Lamictal (lamotrigine) *phenyltriazine* antiepileptic. Warning: Severe, potentially life-threatening rashes have been reported.

lamotrigine (see Lamictal)

Largactil (chlorpromazine) *aliphatic First Generation* antipsychotic

Libritabs, Librium (chlordiazepoxide) anxiolytic and muscle relaxant, treatment of alcohol withdrawal syndromes

Lithium Carbonate (Carbolith, Cibalth-S, Duralith, Eskalith, Lithane, Lithizine, Lithobid, Lithonate, Lithotabs) *lithium*. treatment of manic episodes of bipolar disorder

lorazepam (see Ativan)

Loxapac, Loxitane (loxapine) *tricyclic dibenzoxazepine* antipsychotic

loxapine (see Loxapac, Loxitane)

Ludiomil (maprotiline) treatment of chronic depression, including the depressed phase of bipolar disorder

Luvox (fluvoxamine) *SSRI* antidepressant, treatment of obsessive-compulsive disorder

Manerix (moclobemide) *MAOI* antidepressant.

Marplan (isocarboxazid) *MAOI* antidepressant

maprotiline (see Ludiomil)

Mellaril (thioridazine) *First Generation* Low dosage for agitation, depression, sleep disturbances of non-psychotic brain disorders. At higher dose, as an antipsychotic

Meprin, Miltown (see Equanil)

mesoridazine (see Serentil)

methylphenidate (see Ritalin)

mirtazepine (see Remeron)

Moban (molindone hydrochloride) *dihydroindolone compound* antipsychotic, tranquilizer

moclobemide (see Manerix)

Modecate (fluphenazine) *First Generation* antipsychotic

molindone hydrochloride (see Moban)

Mysoline (primidone) anticonvulsant

naltrexone (see Revia)

Nardil (phenelzine) MAOI antidepressant for treatment of mixed anxiety and depression

Navane *thiothixene* antipsychotic for psychosis resistant to other treatment

nefazodone (see Serzone)

Norpramin, Pertofrane (desipramine) *tricyclic* antidepressant nortriptyline (see Pamelor)

olanzapine (see Zyprexa)

Orap (pimozide) antipsychotic, also Tourette's syndrome

oxazepam (see Serax)

Pamelor (nortriptyline) *tricyclic* antidepressant

Parnate (tranylcypromine) *non-hydrazine reversible* MAOI treatment of moderate to severe depression, including depressive phase of bipolar disorder

Paroxetine (see Paxil)

Paxil (paroxetine) SSRI antidepressant

Paxipam (halazepam) *benzodiazepine* anxiolytic

pemoline (see Cylert)

Permitil (see Modecate, Prolixin) (fluphenazine) *First Generation* antipsychotic, schizophrenia

perphenazine (see Etrafon)

Pertofrane (see Norpramin) (desipramine) *tricyclic* antidepressant

phenelzine (see Nardil)

phenytoin sodium (see Dilantin)

pimozide (see Orap)

prazepam (see Centrax)

primidone (see Mysoline)

Prolixin (see Modecate, Permitil) (fluphenazine) *First Generation* antipsychotic

propranolol (see Inderal)

protriptyline (see Triptil)

Prozac (fluoxetine) *SSRI* antidepressant, also for PMS, eating disorders and obsessive-compulsive disorder

quetiapine (see Seroquel)

Remeron (mirtazepine) antidepressant

Restoril (temazepam) *benzodiazepine* hypnotic, for short-term relief of insomnia

Revia (naltrexone) opiate antagonist reduces craving for alcohol; also, reduction of dissociation

Risperidal (risperidone) *second generation* antipsychotic for maintenance of schizophrenia, bipolar disorder

risperidone (see Risperidal)

Ritalin (methylphenidate) *amphetamine* ADHD

Rivotril (clonazepam) *benzodiazepine* anxiolytic

Serafem (see Prozac). *SSRI* prescribed for PMDD (premenstrual dysphoric disorder)

Serax (oxazepam) *benzodiazepine* sedative, anxiolytic

Serentil (mesoridazine) *First Generation* tranquilizer, antipsychotic

Seroquel (quetiapine) *second generation* antipsychotic for maintenance of schizophrenia

sertraline (see Zoloft)

Serzone (nefazodone) NOTE: potential for life-threatening liver failure

Sinequan (doxepin) *dibenzoxipin* antipsychotic, antidepressant, anxiolytic
Stelazine (trifluoperazine) *First Generation* anxiolytic, antiemetic, antipsychotic
Strattera (atomoxetine HCl) *SNRI* non-stimulant for ADHD
Sulpiride *selective dopamine* D2 antagonist antipsychotic
Surmontil (trimipramine) *tricyclic* antidepressant
Symmetrel (amantadine) reduces severity or abolishes drug-induced extrapyramidal reactions including parkinsonism syndrome, dystonia and akathisia. Not effective in the management of tardive dyskinesia.

T-Quil (diazepam) (see Valium) *benzodiazepine* anxiolytic, muscle relaxant, sedative
tacrine hydrochloride (see Cognex)

Tegretol (carbamazepine) *tricyclic* anticonvulsant, for acute mania, bipolar disorder
temazepam (see Restoril)

Temposil (calcium carbimide) for alcoholism

thioridazine (see Mellaril)

thiothixene (see Navane)

Thorazine (chlorpromazine) (see Largactil) *aliphatic First Generation* antipsychotic

Tofranil (imipramine) (see Janamine) *tricyclic* antidepressant

Topamax (topiramate) anticonvulsant, used for treatment of bipolar disorder

trazodone (see Desyrel)

Triavil (perphenazine) tranquilizer and antidepressant

triazolam (see Halcion)

trifluoperazine (see Stelazine)

trihexyphenidyl (see Artane)

Trilafon (perphenazine) *First Generation* anxiolytic, antipsychotic

Triptil (protriptyline) (see Vivactil) antidepressant

Valium (diazepam) *benzodiazepine* anxiolytic, sedative, muscle relaxer

Valproate, Valrelease (valproic acid) for maintenance of bipolar disorder

venlafaxine (see Effexor)

verapamil (see Isoptin, Calan)

vigabatrin (see Sabril)

vistaril (see Atarax)

Vivactil (protriptyline) *tricyclic* antidepressant

Wellbutrin (bupropion hydrochloride) *aminoketone* antidepressant

Xanax (alprazolam): anxiolytic, specified for GAD

Zarontin (ethosuximide) anticonvulsant

ziprasidone (see Geodon) *second generation* antipsychotic

Zoloft (sertraline) *SSRI* antidepressant

zopiclone (see Imovane)

zuclopenthixol (see Clopixol)

Zyprexa (olanzapine) *thienobenzodiazepine* antipsychotic for schizophrenia and bipolar disorder

Psychiatric Medication Side Effects

Any reactions or side effects that are unusual, annoying, or that interfere with functioning should be reported to the doctor immediately. Following are common side effects of drug classes.

Tricyclic Antidepressants Side Effects

- Dry mouth—drink sips of water; chew sugarless gum; brush teeth daily.
- Constipation—eat bran cereals, prunes, fruit, and vegetables.
- Bladder problems—older men with enlarged prostate conditions may be at particular risk. Notify a healthcare provider if there is any pain.
- Sexual problems—sexual functioning may be impaired; if this is worrisome, discuss with the doctor.
- Blurred vision—this is usually temporary and will not require new glasses. Glaucoma patients should report any change in vision to the doctor.
- Dizziness—rising from the bed or chair slowly is helpful.
- Drowsiness as a daytime problem—this usually passes soon. A person who feels drowsy or sedated should not drive or operate heavy equipment. Sedating antidepressants may be taken at bedtime to help sleep and to minimize daytime drowsiness.
- Increased heart rate—pulse rate is often elevated. Older patients should have an electrocardiogram (EKG) before beginning tricyclic treatment.

SSRI, SNRI Antidepressants Side Effects

- Sexual problems—fairly common, but reversible, in both men and women.
- Headache—usually goes away after a short time.
- Nausea—may occur after a dose, but it will disappear quickly.
- Nervousness and insomnia (trouble falling asleep or waking often during the night)—these may occur during the first few weeks; dosage reductions or time will usually resolve them.
- PARADOXICAL effect: Potential suicidal feelings. DISCONTINUE.
- Agitation (feeling jittery)—if this happens for the first time after the drug is taken, and continues, notify your healthcare provider immediately.
- Any of these side effects may be amplified when an SSRI is combined with other medications that affect serotonin. In extreme cases, such a combination of medications (e.g., an SSRI and an MAOI) may result in a potentially serious or even fatal “serotonin syndrome,” characterized by fever, confusion, muscle rigidity, and cardiac, liver, or kidney problems.

Psychiatric Medication Side Effects

(Continued)

Benzodiazepine Side Effects

- Drowsiness — take medication before bedtime.
- Impaired coordination, muscular weakness.
- Impaired memory and concentration.
- Dependence after long-term use.

Lithium Side Effects

- Initially, drowsiness, weakness, nausea, fatigue, hand tremor, or increased thirst and urination. Some effects may disappear or decrease quickly, although hand tremor may persist.
- Weight gain.
- Increased urination and/or enuresis (bed wetting).
- May alter thyroid gland functioning. Requires monitoring by a physician.
- Anything that lowers the level of sodium in the body (reduced intake of table salt, a low-salt diet, heavy sweating, vomiting or diarrhea) may cause a lithium buildup and lead to toxicity.
- Signs of lithium toxicity include nausea, vomiting, drowsiness, mental dullness, slurred speech, blurred vision, confusion, dizziness, muscle twitching, irregular heartbeat, and, ultimately, seizures. A lithium overdose can be fatal.

Anticonvulsant Side Effects

(valproic acid, Depakote, divalproex sodium)

- Occasional gastrointestinal side effects.
- Headache, double vision, dizziness, anxiety, or confusion.
- May affect liver function.
- May increase testosterone levels in teenage girls and produce polycystic ovary syndrome (before age 20). This may cause obesity, hirsutism (body hair), and amenorrhea. Young female patients should be monitored.

First Generation Antipsychotic Side Effects

- Movement disorders (extrapyramidal symptoms, Parkinsonism, tardive dyskinesia).
- Sedation and hypotension.
- Weight gain.

Second Generation Antipsychotic Side Effects

- Weight gain.
- Increases in cholesterol, triglyceride and glucose levels.
- Sexual dysfunction.

MAOI Diet

Reference

Dr. Bob's
EnPsychlopedia
www.dr-bob.org

Monoamine oxidase inhibitors (MAOI) can react with tyramine, an amino acid found in many foods. This reaction ranges from headaches and hypertension to cardiac failure. Someone who is prescribed a MAOI must always follow the MAOI diet, which restricts foods that may contain high levels of tyramine. For some people, reactions can be minimal and abstinence from these foods may be unnecessary. Yet, what doesn't bother some people may hurt others. Generally, any protein product that has been sitting in the refrigerator is suspect.

The following are dietary guidelines only. Consult a physician or pharmacist for the latest information, as well as a list of prescription and over-the-counter drugs that ALSO may cause an adverse reaction. The following list is divided into two parts: foods to avoid and foods to use with caution. It is not inclusive, and may omit an offending food.

NOTE: NEVER take a MAOI while you are taking another antidepressant medication. Allow 14 days after discontinuing a MAOI before starting another antidepressant medication.

Foods to Avoid

Avoid foods that are overripe, that have been aged or fermented, or that are spoiled—including leftovers.

Avoid protein foods that have been processed or aged, including lunch meats, smoked meats, and almost all cheese, including yogurt. (Cottage and cream cheese are acceptable, unless the product has been opened and refrigerated for more than a few days.) Fresh meat and fish are fine. Remember, the key word is freshness.

Alcohol and “non-alcohol” drinks should be avoided or used with caution. Red wine may trigger headaches.

Some pickled products, especially pickled herring, contain high levels of tyramine—also canned sardines and anchovies.

Avoid protein extracts and protein dietary supplements.

Yeast extracts such as brewer's yeast and yeast vitamin supplements should be avoided. These extracts are often used in prepared foods, such as canned soup, so check labels.

Bread baked with yeast is fine.

Miso soup and bean curd are fermented products containing high levels of tyramines and should be avoided.

Foods to Use with Caution

Fermented soy sauce should be used with caution.

Overripe avocados contain tyramine; use with caution.

Sauerkraut has tyramine content, use with caution.

Some people report reactions to chocolate and/or caffeine, as well as broad beans (fava beans, lima beans) and peanut butter.

New Psychiatric Medications

New psychiatric medications are being developed at an unprecedented rate, following research on the interaction of certain chemicals (called neurotransmitters) in the nervous system. The nervous system can be likened to a series of sparks (imagine spark plugs) called “synapses.” For every process in your body, a synaptic “spark” releases chemicals along the nerve paths. Serotonin is one of those neurotransmitters. When it reaches a particular site or receptor, it is either metabolized (changed), depleted, or taken back (reuptake) from the receptor. New drugs have the potential of altering (usually increasing) the concentration of serotonin at particular receptor sites; thus the term selective serotonin reuptake inhibitor (SSRI).

In his article, “Serotonin: The Neurotransmitter for the ’90s” (Drug Topics, October 10, 1994), Ronald F. Borne, Ph.D., explains the importance of serotonin, which is produced and stored in the human brain:

Of the chemical neurotransmitter substances, serotonin is perhaps the most implicated in the etiology or treatment of various disorders, particularly those of the central nervous system, including anxiety, depression, obsessive-compulsive disorder, schizophrenia, stroke, obesity, pain, hypertension, vascular disorders, migraine and nausea.

Borne continues:

The functions of serotonin are numerous and appear to involve control of appetite, sleep, memory and learning, temperature regulation, mood behavior (including sexual and hallucinogenic behavior), cardiovascular function, muscle contraction, endocrine regulation and depression...

The new drugs target only specific neurotransmitter sites and produce a “lower side effect profile.” For instance, risperidone (Risperdal™) has been reported to reduce hallucinations (in schizophrenia), and fluoxetine (Prozac™) improve thought processes associated with obsessive-compulsive disorder, eating disorders, and chronic depressive disorders without causing extrapyramidal symptoms such as tardive dyskinesia, Parkinsonism, involuntary muscular movements, and rigidity.

Clozapine (Clozaril™), the first second generation antipsychotic, reduced or eliminated some symptoms of schizophrenia (such as hallucinations), and improved cognition. Clozapine has serious side effects—agranulocytosis, increase in seizures, tachycardia—and requires frequent blood tests. Today, medications for schizophrenia are more effective and present fewer side effects.

References

- American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders. (4th edition.) Washington, D.C.: American Psychiatric Association.
- Borne, Ronald F. (October 10, 1994). Serotonin: The neurotransmitter for the '90s. Drug Topics.
- Crowley, Kathleen. (2000) The Power of Procovery in Healing Mental Illness: Just Start Anywhere. San Francisco: Kennedy Carlisle Publishing Co.
- Diller, Lawrence H., MD. (1998) Running on Ritalin: A Physician Reflects on Children, Society, and Performance in a Pill. New York: Bantam Books.
- Greene, Ross W., PhD., (2001) The Explosive Child, 2nd Edition. New York: Harper Collins.
- The Harvard Mental Health Letter. (December 1997). Boston: Harvard Medical School.
- NIMH. (2001) "Childhood-Onset Schizophrenia: An Update from the National Institute of Mental Health." Washington, DC: Government Printing Office.
- Panzarino, P. J. (2002). "Electroconvulsive Therapy" www.medicinenet.com.
- Yeargin-Allsopp M, Rice C, Karapurkar T, Doernberg N, Boyle C, Murphy C., (2003). JAMA. 2003 Jan 1;289(1):49-55.

Resources

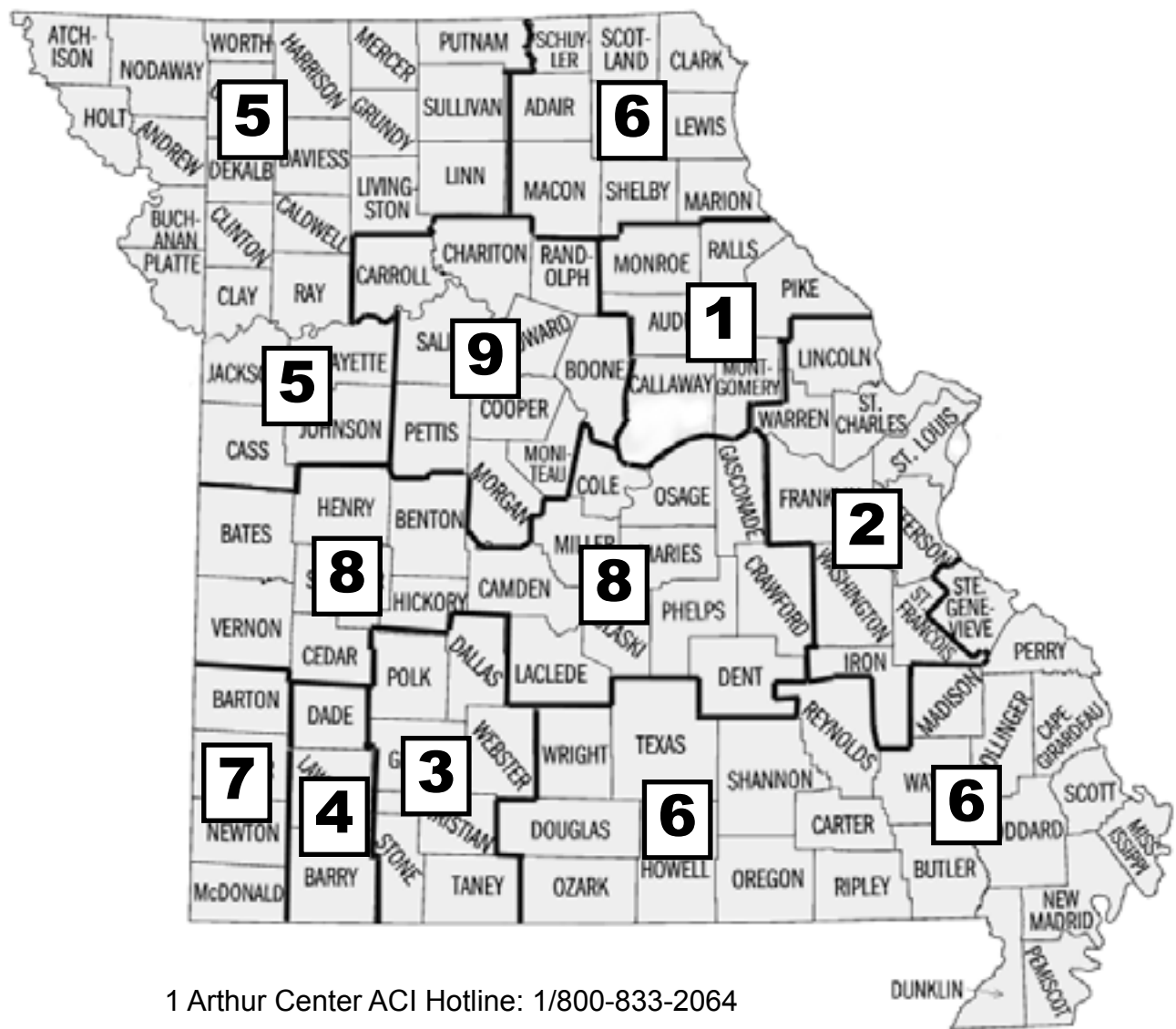
We are indebted to the American Psychiatric Association for permission to reprint information from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR).

The latest research and reviews of literature on mental health can be found on the World Wide Web. Sites of interest include:

- American Foundation for Suicide Prevention www.afsp.org
- American Psychiatric Association www.psych.org
- Dr. Bob's EnPsychlopedia www.dr-bob.org
- HelpGuide.org www.helpguide.org/mental/self_injury.htm
- Mental Health American www.mentalhealthamerica.net
- Mo. Department of Mental Health www.dmh.mo.gov
- Missouri Institute of Mental Health www.mimh.edu
- National Alliance on Mental Illness
- NAMI of Missouri mo.nami.org
- National Alzheimer's Association www.alz.org
- National Institute of Drug Abuse www.nida.nih.gov/nidahome.html
- National Institute of Mental Health www.nimh.nih.gov
- Obsessive-Compulsive Foundation www.ocfoundation.org
- Psychology Information Online www.psychologyinfo.com
- Procovery www.procovery.com
- Self-Injury Support www.sisupport.org/coping_skills.htm

Statewide 24-hour Crisis Hotlines

from the Mo. Department of Mental Health



1 Arthur Center ACI Hotline: 1/800-833-2064

2 Behavioral Health Response ACI Hotline: 1/800-811-4760

3 Burrell ACI System: 1/800-494-7355

4 Clark Center ACI Hotline: 1/800-801-4405

5 Comm Care ACI Hotline: 1/888-279-8188

6 MOCARS ACI Hotline: 1/800-356-5395

7 Ozark ACI Hotline: 1/800-247-0661

8 Pathways ACI Hotline: 1/800-833-3915

9 Burrell Behavioral Health Central Region: 1/800-395-2132



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